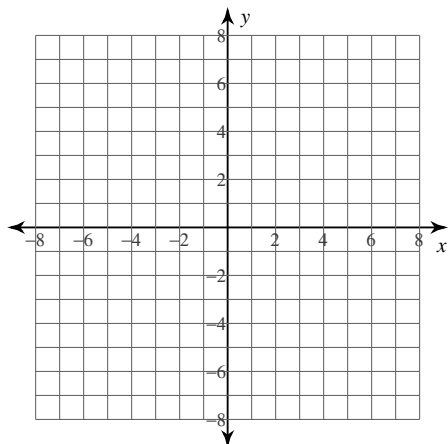


Assignment

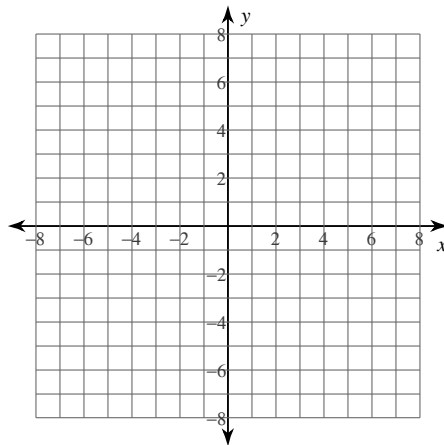
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Identify the vertex and axis of symmetry of each. Then sketch the graph.

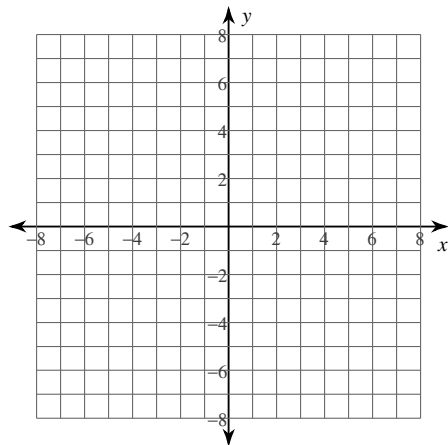
1) $y = -\frac{1}{3}(x-4)(x-3)$



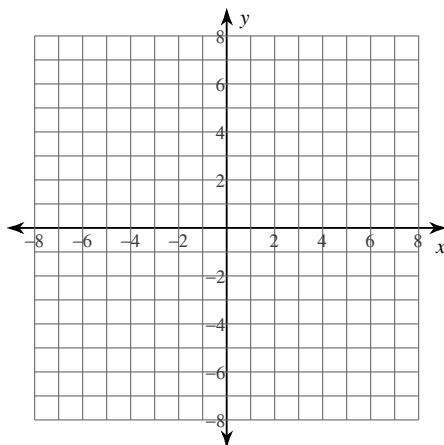
2) $y = 2x(x-2)$



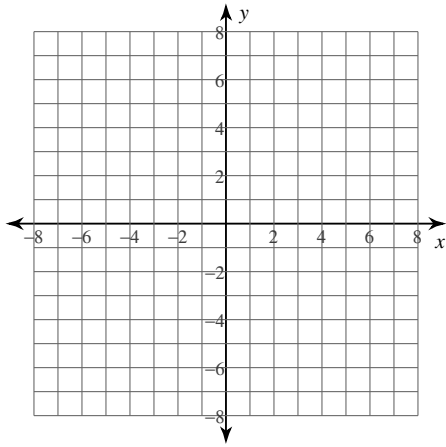
3) $y = x(x+5)$



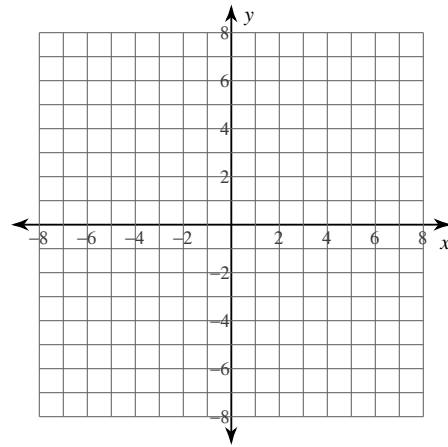
4) $y = -\frac{1}{2}(x+7)(x+1)$



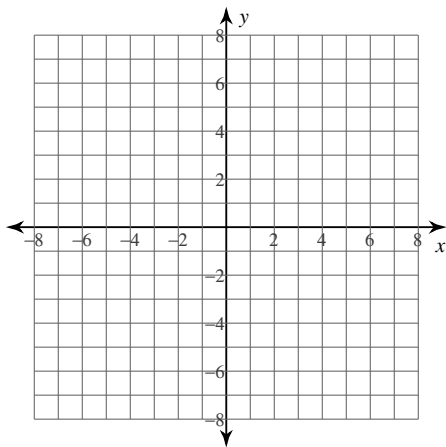
5) $y = (x - 4)(x - 2)$



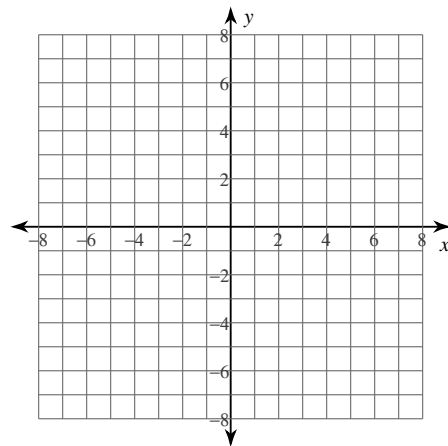
6) $y = (x + 3)(x + 2)$



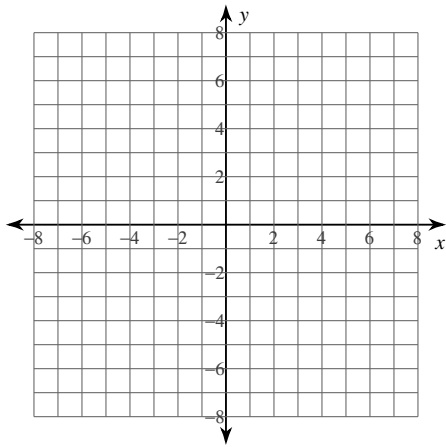
7) $y = -\frac{1}{3}x(x + 2)$



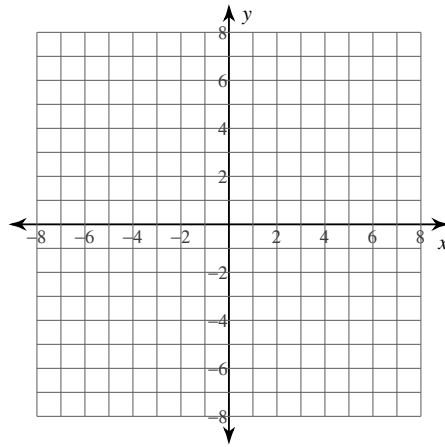
8) $y = -(x - 6)(x - 4)$



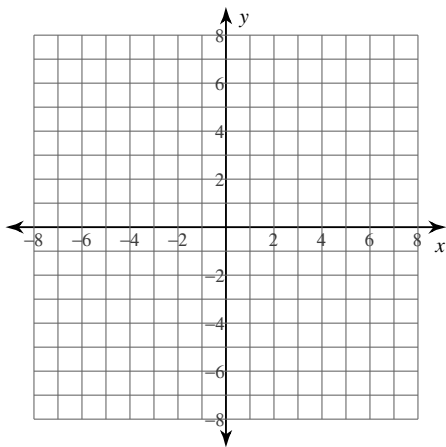
$$9) y = 2(x - 3)(x - 2)$$



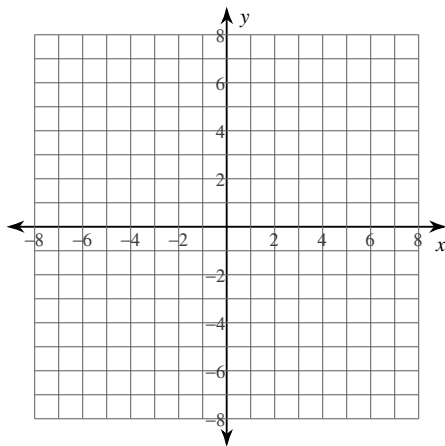
$$10) y = -2(x - 6)^2$$



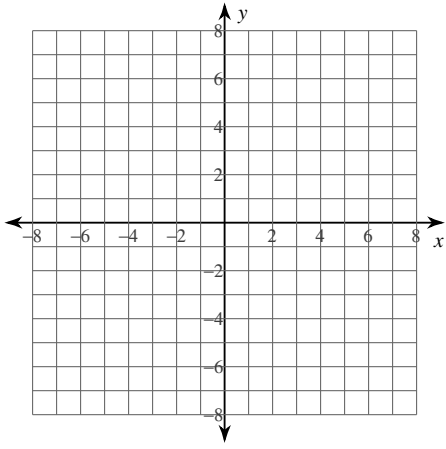
$$11) y = \frac{1}{3}(x + 7)(x + 2)$$



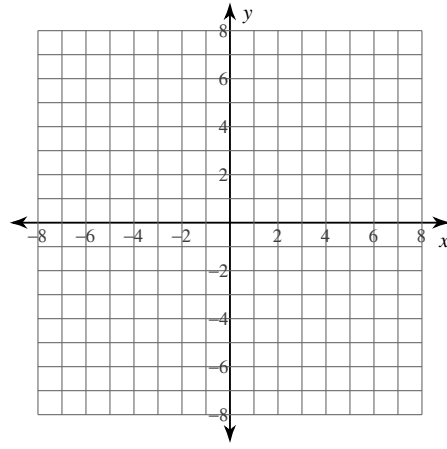
$$12) y = -(x - 1)(x + 1)$$



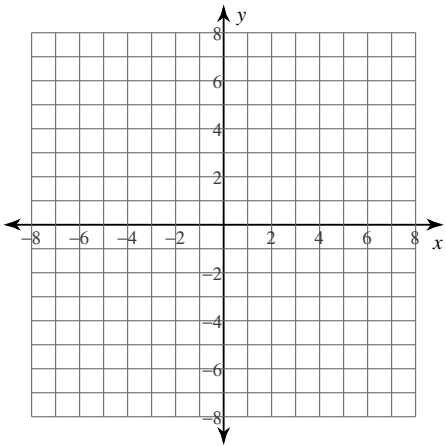
13) $y = 2x(x - 1)$



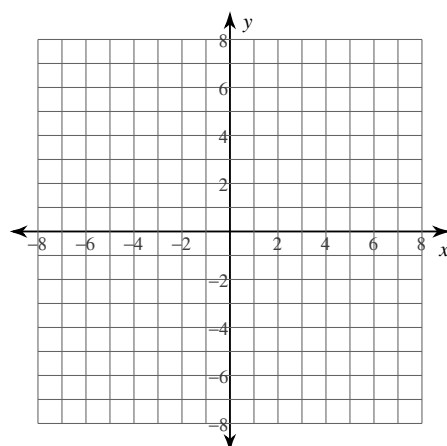
14) $y = x(x + 3)$



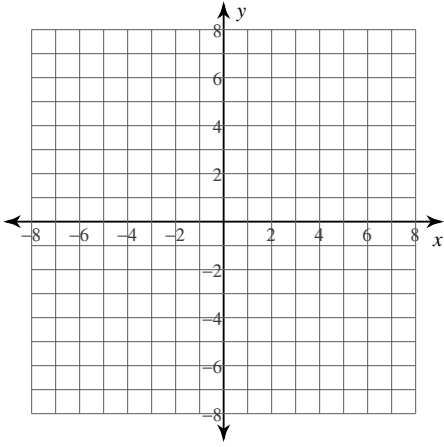
15) $y = -(x - 6)(x - 2)$



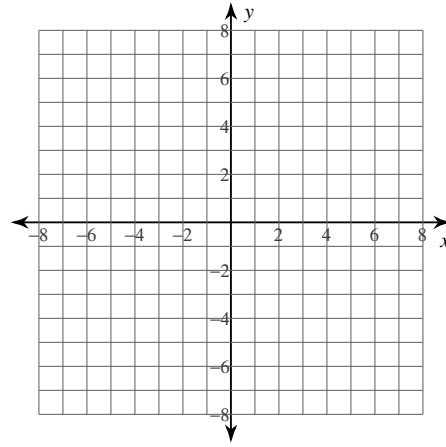
16) $y = 2x(x + 1)$



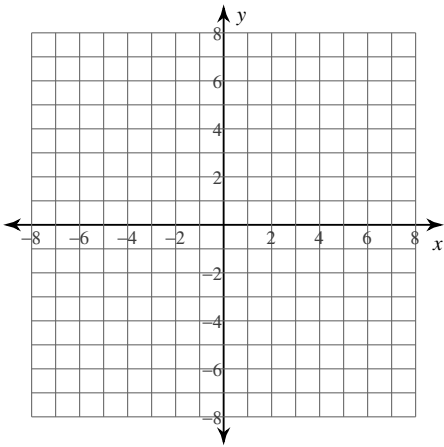
$$17) y = -(x - 5)(x - 1)$$



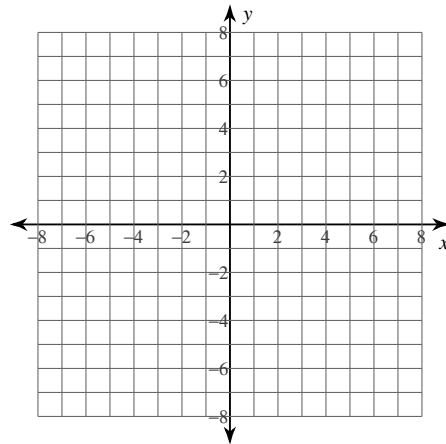
$$18) y = -2(x - 4)^2$$



$$19) y = -\frac{1}{2}(x - 2)(x + 4)$$



$$20) y = 2x(x - 4)$$

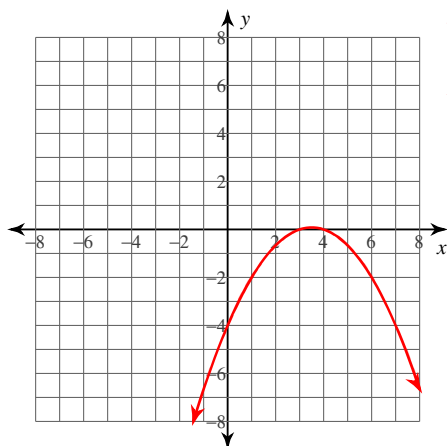


Assignment

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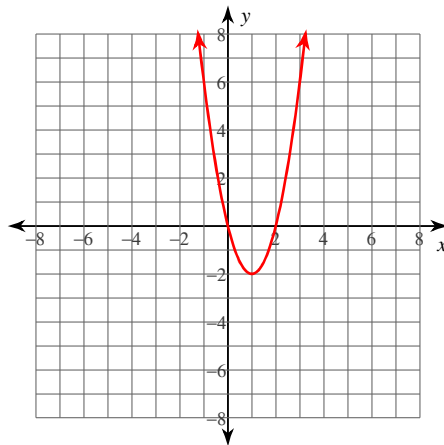
Identify the vertex and axis of symmetry of each. Then sketch the graph.

1) $y = -\frac{1}{3}(x-4)(x-3)$



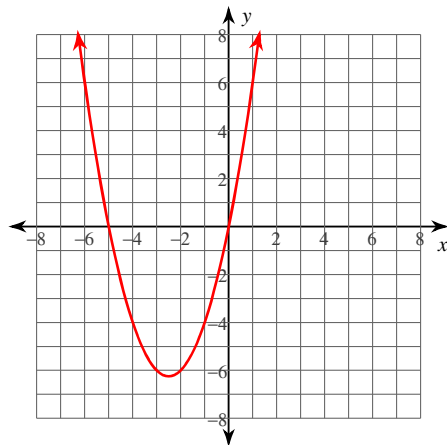
Vertex: $(\frac{7}{2}, \frac{1}{12})$
 Axis of Sym.: $x = \frac{7}{2}$

2) $y = 2x(x-2)$



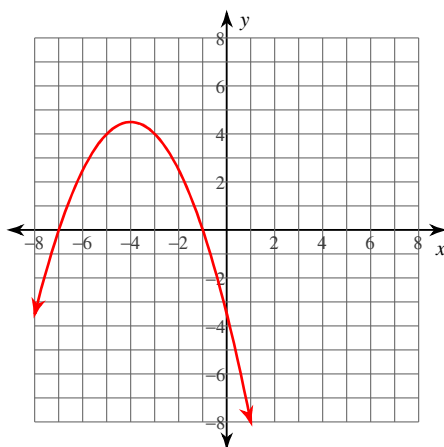
Vertex: $(1, -2)$
 Axis of Sym.: $x = 1$

3) $y = x(x+5)$



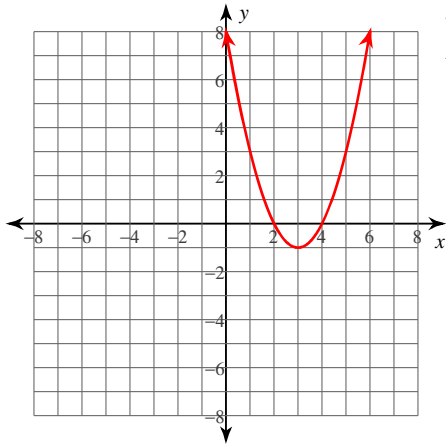
Vertex: $(-\frac{5}{2}, -\frac{25}{4})$
 Axis of Sym.: $x = -\frac{5}{2}$

4) $y = -\frac{1}{2}(x+7)(x+1)$



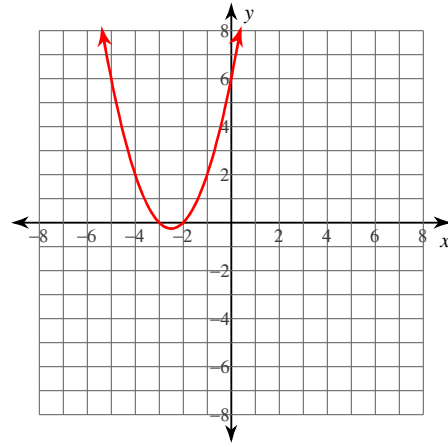
Vertex: $(-4, \frac{9}{2})$
 Axis of Sym.: $x = -4$

$$5) y = (x - 4)(x - 2)$$



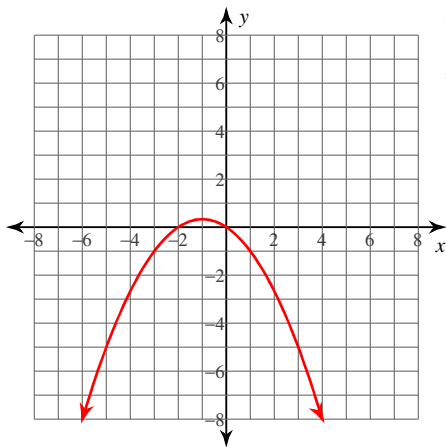
Vertex: $(3, -1)$
Axis of Sym.: $x = 3$

$$6) y = (x + 3)(x + 2)$$



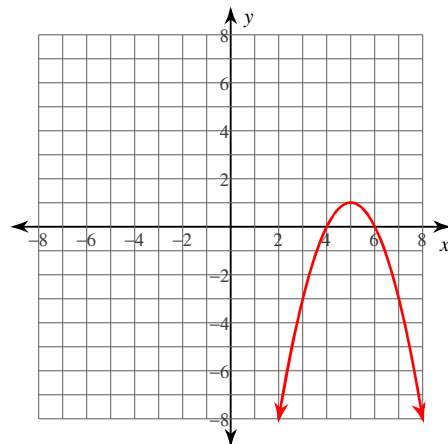
Vertex: $\left(-\frac{5}{2}, -\frac{1}{4}\right)$
Axis of Sym.: $x = -\frac{5}{2}$

$$7) y = -\frac{1}{3}x(x + 2)$$



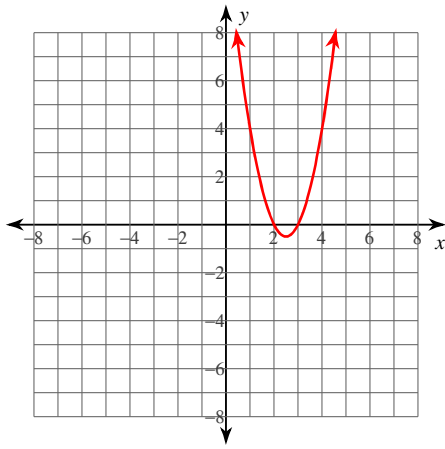
Vertex: $\left(-1, \frac{1}{3}\right)$
Axis of Sym.: $x = -1$

$$8) y = -(x - 6)(x - 4)$$



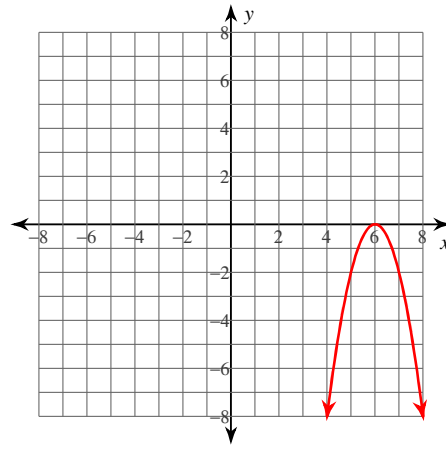
Vertex: $(5, 1)$
Axis of Sym.: $x = 5$

9) $y = 2(x - 3)(x - 2)$



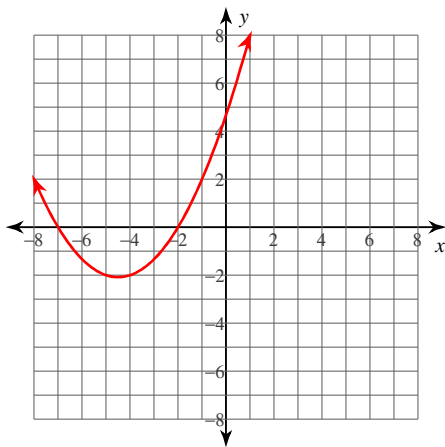
Vertex: $\left(\frac{5}{2}, -\frac{1}{2}\right)$
 Axis of Sym.: $x = \frac{5}{2}$

10) $y = -2(x - 6)^2$



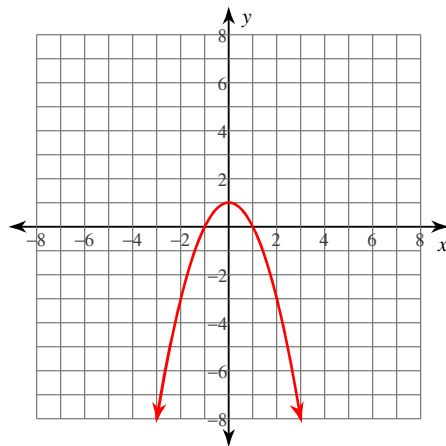
Vertex: $(6, 0)$
 Axis of Sym.: $x = 6$

11) $y = \frac{1}{3}(x + 7)(x + 2)$



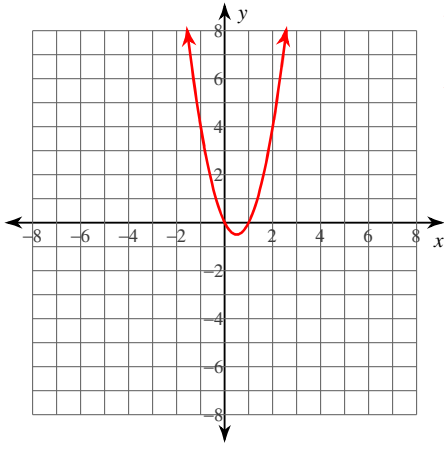
Vertex: $\left(-\frac{9}{2}, -\frac{25}{12}\right)$
 Axis of Sym.: $x = -\frac{9}{2}$

12) $y = -(x - 1)(x + 1)$



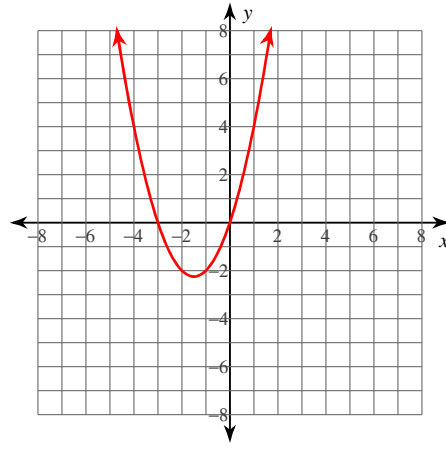
Vertex: $(0, 1)$
 Axis of Sym.: $x = 0$

13) $y = 2x(x - 1)$



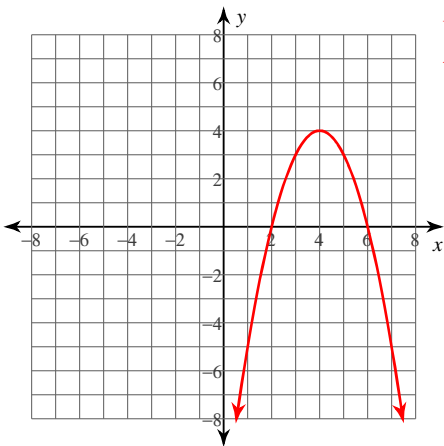
Vertex: $\left(\frac{1}{2}, -\frac{1}{2}\right)$
 Axis of Sym.: $x = \frac{1}{2}$

14) $y = x(x + 3)$



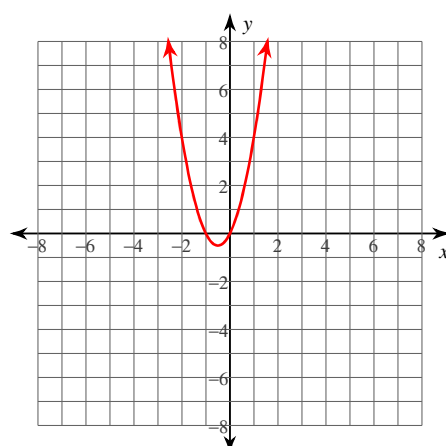
Vertex: $\left(-\frac{3}{2}, -\frac{9}{4}\right)$
 Axis of Sym.: $x = -\frac{3}{2}$

15) $y = -(x - 6)(x - 2)$



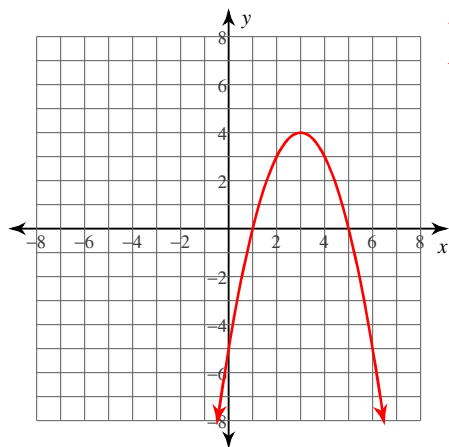
Vertex: $(4, 4)$
 Axis of Sym.: $x = 4$

16) $y = 2x(x + 1)$



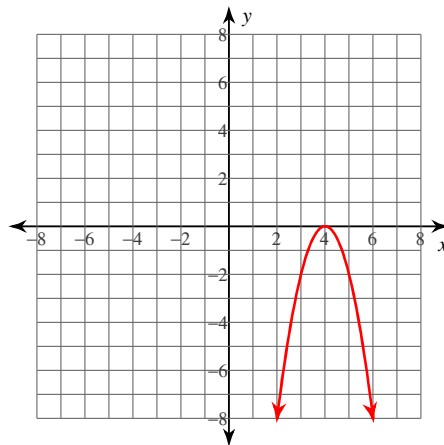
Vertex: $\left(-\frac{1}{2}, -\frac{1}{2}\right)$
 Axis of Sym.: $x = -\frac{1}{2}$

$$17) y = -(x - 5)(x - 1)$$



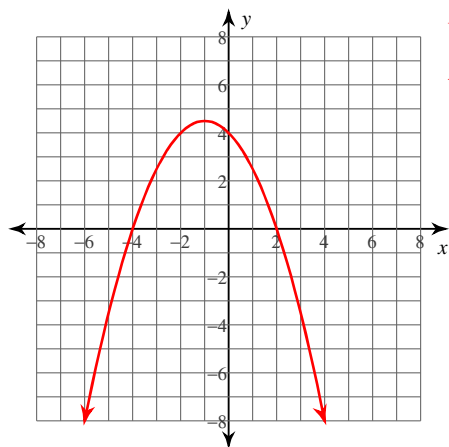
Vertex: (3, 4)
Axis of Sym.: $x = 3$

$$18) y = -2(x - 4)^2$$



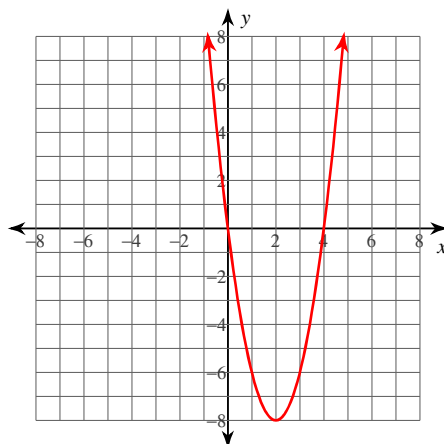
Vertex: (4, 0)
Axis of Sym.: $x = 4$

$$19) y = -\frac{1}{2}(x - 2)(x + 4)$$



Vertex: $(-1, \frac{9}{2})$
Axis of Sym.: $x = -1$

$$20) y = 2x(x - 4)$$



Vertex: (2, -8)
Axis of Sym.: $x = 2$